## P.I.N.E.S. Review of AECOM Responses to Remedial Investigation Comments

The comments on the revised draft Remedial Investigation Report dated November 3, 2009, prepared by EPA and provided to the PRPs, identify critical shortcomings of the draft report. P.I.N.E.S. is concerned that the response to EPA Comment # 2 submitted on December 1, 2009 by AECOM misses the purpose of the comment and responds in an unacceptably narrow manner that may contribute to an inadequate HHERA. P.I.N.E.S. encourages EPA to direct the AECOM to appropriately respond to what we feel was the intent of Comment # 2.

Comment #2: You have insufficient evidence that all groundwater flow from the area of investigation flows into the Brown Ditch system unless you are including the wetlands of the Indiana Dunes National Lakeshore (IDNL) as part of the "related wetlands" to the ditch system. If the IDNL wetlands are part of the Brown Ditch system, this fact must be explicitly noted at the appropriate places in the report. If they are not, there are sufficient gaps in the monitoring well network that leave questions as to the flow pattern of groundwater in those parts of the system near route 12 east and west of Brown Ditch to call into question the accuracy of that assertion and it should be removed or modified in the report.

Based upon concerns we heard expressed by parties during the last year, P.I.N.E.S. believes this comment was intended to be sure that the Final RI Report clearly acknowledges that portions of the IDNL wetlands across Route 12 are potentially at risk from groundwater migration of contaminants from disposal/use areas for CCWs/CCBs. Unfortunately, Comment #2 mistakenly links the IDNL wetlands that may be at risk only with the Brown Ditch drainage basin.

Certainly IDNL wetlands in the Brown Ditch drainage basin are at risk. However, not all surface water drainage from the Pines Area of Investigation is part of the Brown Ditch drainage basin and there is no reason to suspect, or data to suggest, that groundwater migration will somehow cross surface drainage divides and flow only to wetlands in the Brown Ditch basin.

Specifically, there is a surface drainage from the northwest corner of the AoI that flows northwest into wetlands of the IDNL, crosses westward under Lake Shore County Rd, and then flows southwestward through the Great Marsh as part of the Derby Ditch drainage. The headwaters of this drainage from Town of Pines and the AoI into IDNL is across Route 12 and just west of Pines Bible Church, approximately where Pine St meets Route 12. It is not depicted on the USGS topographic map, but is seen on the AoI topographic map that is Appendix Z of the Draft RI Report. It is also visible on Roadside images from Google Earth.

P.I.N.E.S. believes Comment #2 was intended to address potential risks to the Great Marsh wetlands from contaminants of concern migrating from the AoI, whether within the Brown Ditch basin or the Derby Ditch Basin, and not just wetlands in the former. We urge the EPA to clarify this to AECOM and have the Final RI Report text reflect that clarification.

[Note: P.I.N.E.S. did not notice this problematic language in Comment #2 until we considered AECOM's response and map reference, which does discuss only wetlands in the Brown Ditch drainage basin, rather than all at-risk wetlands. We apologize for not suggesting a modification at the time we reviewed the comments to the Draft RI Report.]